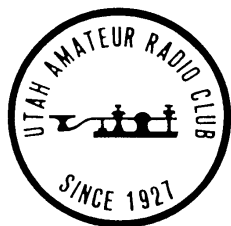




Dave, WA7GIE

Salt Lake City area $\leq 10 \text{ GHz} \leq$ Brian Head ski resort area.

Utah microwave activity grows as the Salt Lake area makes contact to southern Utah on 10 GHz.



Volume 48, Issue 10, November 2005

Periodicals

The

Microvolt

Please Send Dues to:

UARC

c/o Dick Keddington

1992 El Dorado Drive

Holladay, UT 84124-1652

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Prologue

The Utah Amateur Radio Club was organized under its present name in 1927, although its beginnings may date back as early as 1909. In 1928, it became affiliated with the American Radio Relay League (club #1602) and is a non-profit organization under the laws of Utah. It holds a club station license with the call W7SP, a memorial call for Leonard (Zim) Zimmerman, an amateur radio pioneer in the Salt Lake City Area.

Meetings: The club meets each month except July and August. The meetings are held on the first Thursday of the month at 7:30 PM in the University of Utah Engineering and Mines Classroom (EMCB) building, Room 101.

Membership: Club membership is open to anyone interested in amateur radio; a current license is not required. Dues are \$15 per year, including a *Microvolt* subscription. The *Microvolt* and membership cannot be separated. Those living at the same address as a member who has paid \$15 may obtain a membership without a *Microvolt* subscription for \$9. Send dues to the Club Secretary: Dick Keddington, KD7TDZ, 1992 El Dorado Drive, Holladay, UT 84124-1652. ARRL membership renewals should specify ARRL Club #1602.

Contributions: Monetary contributions are gladly accepted. Send directly to the Club Treasurer: Chuck Johnson, 1612 W. 4915 S. Taylorsville, UT 84123-4244. For in kind contributions, please contact any board member to make appropriate arrangements.

Repeaters: UARC maintains the 146.62- and 146.76- repeaters. The repeaters are administered by the UARC Repeater Committee. Comments and questions may be directed to any Committee member. The Lake Mountain repeater (146.76-) has autopatch facilities on both the Orem exchange (covering Santequin to Lehi) and the Salt Lake City exchange (covering Draper to Layton). The 449.10 repeater has autopatch facilities into Salt Lake City only available to UARC members. Due to the volume of traffic, only mobiles should use this autopatch. Autopatch use is open to all visitors to our area and to all club members. Non-members who wish to use the autopatch are encouraged to help with the cost of maintaining the equipment by joining the club.

Ham Hot-Line: The Utah Amateur Radio Club (UARC) has a Ham Hotline, 583-3002. Information regarding Amateur Radio can be obtained, including club, testing, meeting, and membership information. If no one answers leave your name, telephone number and a short message on the answering machine, and your call will be returned.

Publication: The *Microvolt* is the official publication of the club. Deadline for submissions to the *Microvolt* is the 10th of each month prior to publication. Submissions by email are preferred (uarc@xmission.com), but other means including diskettes and typewritten submissions can be mailed directly to: Telvin Mills, 6864 Beargrass Rd., West Jordan, UT 84084. All submissions are welcome but what is printed and how it is edited are the responsibility of the Editor and the UARC board. Reprints are allowed with proper credits to The *Microvolt*, UARC, and authors. Changes in mailing address should be communicated to the Club Secretary: Dick Keddington, 1992 El Dorado Drive, Holladay, UT, 84124-1652.

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Contents

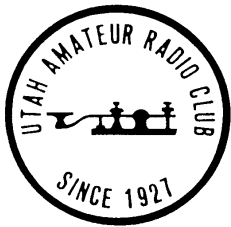
<i>Prologue</i>	2
<i>UARC 2005 Board</i>	2
<i>QST from the Prez</i>	3
<i>November Meeting: Nominations and Something</i>	3
<i>Over 200 Miles on 10 GHz</i>	4
<i>Member of the Month</i>	5
<i>Homebrew Night Pictures</i>	6
<i>Exam Schedule</i>	8

For late breaking news listen to the UARC Information Net
Sundays at 21:00 on 146.62 or set your browser to:
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The Microvolt

The Official Publication of the Utah Amateur Radio Club, Salt Lake City, Utah
Volume 48, Issue 10, November 2005



QST from the Prez

Glen Worthington, WA7X

I really wished I could have been to the homebrew meeting last month. I heard that it was an outstanding meeting with John Bradshaw, KA7TGR, keeping everything in check time wise. Thanks John for being in charge this year!

Nominations will be at our next meeting in November and then elections in December for UARC Club officers. I encourage anyone who is interested to let us know ASAP or make your intentions known prior to the elections. While filling these jobs is very enjoyable, we need to spread the fun around, so please take the opportunity to serve in one of the club positions.

I will not be running for re-election having served two consecutive terms (with an automatic "immediate past president" position on the board), but will continue to support the club activities.

Looking back over the past few months of hurricanes (and another historical record cat 5 on the horizon as I write this), I am so encouraged by amateur radio. In spite of what seems to be a lack of national news coverage, we can read in our ham journals the specific and continuous communications hams continue to provide. That brings up a great point with all the local clubs and organizations dedicated to the emergency service aspect of ham radio. After seeing the massive disorganization in New Orleans, I am very confident in the Utah amateur community. I know that many of us belong to multiple ham clubs and organizations and believe all are beneficial in diverse purpose that reflect the good in systems, training, activities and ongoing traffic handling that molds all of us for that day when our talents may be called upon. But the biggest value in my opinion is our intrinsic ability to stand alone unaided by other infrastructures (sorry IRLP, Echo Link and autopatches which will likely fail in catastrophic emergencies), using our technical and operational skills to communicate. Clearly information exchange is essential and critical to save lives and property and we have historically and will always (despite some radio manufacturers claims), be at the forefront of this heroic need.

While this is just a "hobby" (as I have often stated in the past), during time of emergency we are "changed" into something important and more during that time. I recently was reading an old periodical and came across this partial article (the follow up was in an edition I don't have) written by Robert Hertzberg, W2DJJ, who has long since been a Silent Key. I edited some of the text to reflect contemporary situations but feel this is a very good article on learning the code.

73 de WA7X Glen

November Meeting: Nominations and Something

The November UARC meeting will be held Thursday, November 3. It's getting close to election time and the nominating committee will present its choices. Nominations will also be accepted from the floor. However, to nominate someone you must have his permission first, so come prepared. Think about who you would like to have lead the club in 2006.

There will also be another program feature, but we don't yet know what it is. Our program chairpersons are exploring several possibilities.

Of course, the meeting will include the "standard" meeting features:

- The "Meeting(s) after the meeting": A chance to enjoy pizza or other gastronomic delights with other hams. One group goes to Litza's Pizza, 716 E. 400 South. Another goes to a restaurant that varies from month to month, but will be announced at the meeting.
- The "Meeting before the meeting": A similar get-together for those who can leave work early enough to get there by 5:15 P.M. This month check with Roy, W7ROY, for the location.



Over 200 Miles on 10 GHz

Contact between the Salt Lake City area and near the Brian Head ski resort.

Microwave activity in Utah is steadily growing and events Saturday, September 17 are a good example of what is going on. After cutting our teeth on wideband FM, a few of us have taken the plunge and have gotten on, or are in the process of getting on 10 GHz SSB. The equipment is more complex and expensive, but, for raw DX performance, narrow band signals shine. Dave Williams, WA7GIE, has helped push us along by putting up a CW beacon, got some SSB gear on the air and has helped us learn about activities in microwave hot beds areas like southern California.

The weekend of Sept. 17 was the second installment of a two part annual summer time microwave contest. Dave, WA7GIE, knows a number of the microwave crew in Southern California, Arizona and Southern Nevada. He got wind of his friend Robin, WA6CDR, was going to go to Brian Head Peak, a mountain peak east of Cedar City, Utah, near the Brian Head ski resort. Robin was going to try to work some of the gang in Nevada and California on 10 GHz. He was going to run about 7 watts into a 4 foot dish! Dave works frequently on the big radio installation on the 9300-foot Nelson Peak, one of the high pointy peaks about mid way in the Oquirrh Mountain range west of Salt Lake City. You can see the peak easily from the valley. It has multiple antennas and is straight west of 7800 South. It is about 5 miles south of Farnsworth Peak where KSL and the huge digital TV transmitting antenna are located.



Dave Williams, WA7GIE, all smiles as he completes a contact from Nelson Peak, in the Oquirrh mountains west of Salt Lake with Robin, WA6CDR, on Brian Head Peak near the Brian Head ski resort east of Cedar City, over 200 miles away!! That is Dave's dish, his 10 GHz transverter and associated switching circuitry is in the box below the FT-817 used as an IF.

The chance of making the contact with Brian Head was thin because Nelson Peak is not the highest peak on the Oquirrh and there is a lot of Oquirrh south of Nelson, plus a number of peaks along the 200 plus miles between the two sites, to say nothing of the problems with the curve of the earth. But, what the heck, it just might work and besides, it sounded like a lot of fun for Dave. He invited Dale, WJ7L, who has his 10 GHz SSB gear up and running and me, (Ron, K7RJ, who does not have his SSB gear finished yet), to tag along with him and see if he could make the contact.

Dave had a small dish and runs about 2 watts with a DB6NT 10 GHz transverter and he used a FT-817 for his IF. Dale took his gear with no hope of actually working Robin, but he thought it would be fun to try to at least hear him. Dale's 10 GHz station is a newly constructed Down East Microwave transverter and a Kenwood TS-2000 he uses as an IF. Dale currently runs about ½ watt into a small horn antenna.

We got up to the mountain early with some wind and, till the sun got more serious about its role, it was quite chilly. Considering the wind loading on even a small dish antenna, we were lucky that the wind died down by the time we were actually on the air trying to contact Robin. It took a few hours for everyone to be in place and to repair the various bits of technical glitches. We were in contact with Robin via the Cactus repeater system, (which is a very impressive bit of amateur radio engineering). When everything was in place, we made every effort to make the 10 GHz contact. We strained our ears, but could hear nothing. We checked and rechecked everything, including carefully checking the pointing of the antenna which is quite critical with any high gain antenna, especially microwave antennas which can have huge gains, therefore very directional. We gave up for a while to give Robin a chance to try to work his friends scattered around mountain peaks in California and Nevada. We rechecked our gear and moved a couple hundred yards further west.

When Robin was able to turn his big antenna north towards us again, after being unsuccessful in working into California, we tried again. Again, nothing was heard on Dave's rig with his high gain antenna. But, Dale, with his little horn, heard a faint carrier. It was very weak, but quite distinct. Dale, with his less sensitive but much wider antenna beam width, was able to pick signal was loud and clear. The two stations zeroed in on each other and they easily exchanged reports and had a nice chat on 10 GHz SSB over the 200 mile path. In the mean time, Dale was able to more carefully tune in Robin and could easily copy the SSB signal, but it was quite noisy. When Dale tried to work Robin on SSB, Robin could hear him, but not well enough to work him. They went to CW and easily made the contact with signal strength to spare.

What a thrill for everyone! Over 200 miles on 10 GHz isn't bad in anyone's book, and this was done across a long mountain range. For Robin it was exciting because he made his first contact with a real Utah station and over a very long do. It is still magic to us that those little boxes can send a signal so far away!



Dale, WJ7L, working Robin, WA6CDR, on Brian Head Peak, over 200 miles away. Dale's antenna is the small horn on the end of the transverter which is sitting atop his TS-2000 IF rig. See the telegraph key to the left of Dale. That is what he used to work Robin.

Microwave activity is growing; please join us on the bands. Wideband FM directly on the microwave circuits. Using simple wideband FM equipment running 10mW, Dale and I worked each other easily over an 85-mile path.

The microwave gang in Utah has a breakfast get together every other month on the first Saturday. December 3 will be the next breakfast. We meet at 8:30 AM at the Marie Calendar restaurant on Foothill and 13 S. in Salt Lake. Come join us, even if you are just curious about what type of people hang out on microwaves. Also, the microwave bands are a common topic on the weekly 2-meter sideband net on Mondays at 9:00 PM on 144.250 MHz USB. Hope to see you there.

Ron, K7RJ

Member of the Month

By Linda Reeder

This month we are featuring Pete Robins, KE7CTJ. Pete first got into amateur radio in 1961. Pete had some friends who got him interested in the hobby. Pete obtained his Novice license. Pete was so busy talking on his friends' radios that he never got around to upgrading his license. In 1974 Pete let his license lapse. It wasn't until this year that he took the test and got his license again in April of this

year. It was Tim Purser, WB7CIW, who works for Pete who got Pete back into the hobby. This time Pete obtained his General license. Pete said he is working on getting his Extra class license. At the same time when Pete got his license again his grandson Phillip J. Colby, KE7CTE, took the test and obtained his Technician license. His grandson is now in high school.



Pete and his wife Sheryl have been married for 25 years. They have 4 children: 3 girls and one boy. They have 9 grandchildren and one great grandchild. Pete owns his own electric company. It is called Central Electric. He helps other businesses with their electrical problems. When their power is out he gets them up and running again. He can get called at any time when there is an emergency.

Pete loves building radio equipment and working with antennas. Pete is in the process of putting up a tower and a beam antenna. He hopes to get it up and running before the first snowfall. Pete has a Yaesu 857 and has a dipole antenna at his home. He also uses that radio in his vehicle.

Pete loves to ragchew. He loves to talk to others who share the same interest. He loves to learn about different facets in the hobby. Pete is thinking about getting involved in the public service facet in amateur radio. He says he is going to be taking some classes on that in the near future. Right now he is listening and checking in on the nets that are involved in public service.

Pete is a member of the VHF society, ARRL and UARC. Pete has participated in the UARC information net. One night he was net control, he did the ARRL bulletins and testing information when Gordon was out of town. Pete also helped with getting the power up and running at Field Day at Payson Lakes.

Pete, we wish you the best in getting the tower up and running before the first snowfall.

73, N7HVF Linda Reeder.

Homebrew Night Pictures



Our Emcee for the evening, John,
KA7TGR



John, N7MFQ



Lonnie, K7LO



Robert, KB7GSE



Dick, W7TGC



John, K7JL



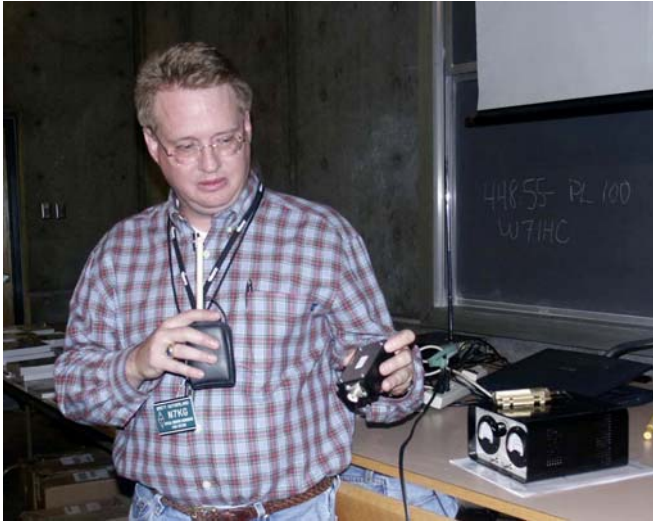
Bryan, W7CBM



Ned, K7ELP



Ron, K7RLS



Brett, N7KG



Clint, KA7OEI



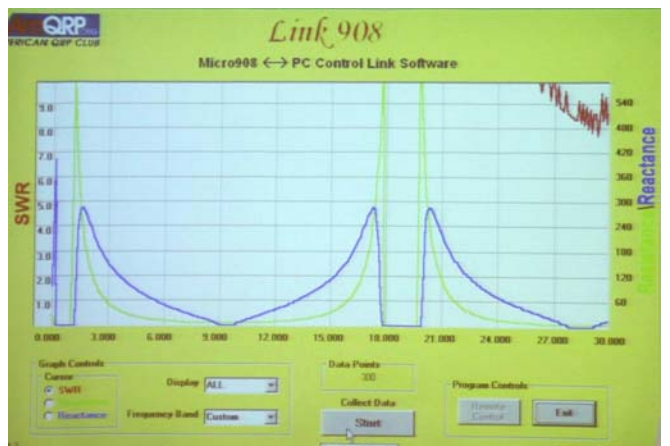
Tony, KE7BBG



Clint again.



John, KA7TGR



Exam Schedule

11/02/05 (Wed.) Farmington
Contact: Rena Skeen, AD7BX
Phone: (801) 773-7048

7/16/05 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

7/16/05 (Wed.) St. George
Contact: Ronald C. Sappington, WI7Z
Phone: (435) 673-4552

7/17/05 (Thu.) Roosevelt
Contact: R. Chandler Fisher, W7BYU
Phone: (435) 722-5440

11/29/05¹ (Tues.) Salt Lake City
Contact: Eugene McWherter, N7OVT
Phone: (801) 541-1871

12/03/05¹ (Sat.) Salt Lake City
Contact: Gordon Smith, K7HFV
Phone: (801) 582-2438

12/10/05 (Sat.) Logan
Contact: Heidi Bleazard, AC7ZC
Phone: (435) 753-7487

12/21/05 (Wed.) Provo
Contact: Steve Whitehead, NV7V
Phone: (801) 465-3983

¹ Pre-registration required. Contact the contact person prior to the examination date.

For more detail either call the contact or checkout the information on our webpage:

<http://www.xmission.com/~uarc/>

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